

ABSTRACT OF THE DISCLOSURE

5 A data sampling method and circuit employing an oversampling clock to oversample a data signal, a phase tracker for use with or in a data sampling circuit, and  
a method for identifying a sequence of best sampling positions for sampling a data  
signal from signal samples generated using an oversampling clock. In some  
embodiments, data indicative of the phase of at least one of the oversampling clock's  
sampling positions relative to the center of the data eye are low-pass filtered in a  
manner determined by the data signal's bit rate. In other embodiments, the number of  
10 dead cycles of the phase tracker decision loop is reduced by generating possible  
solutions in parallel and moving the feedback point so as to occur as late as practical, or  
the phase tracker ignores a sample set when updating its determination of the best  
sampling position when the sample set indicates that the data signal has less than a  
predetermined number of transitions during a corresponding tracking period.

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